

IN THE CLAIMS

Claim 1 (original): A nozzle for plasma torches, consisting of a metal or a metal alloy, characterized in that wear-resistant microparticles of a hard material are embedded in the metal or the metal alloy, at least in certain regions.

Claim 2 (original): The nozzle as claimed in claim 1, characterized in that the maximum grain size of the embedded microparticles is less than or equal to 30 μm .

Claim 3 (currently amended): The nozzle as claimed in claim 1 ~~or 2~~, characterized in that the maximum grain size of the embedded microparticles is less than or equal to 15 μm .

Claim 4 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that that the hard material is a carbide.

Claim 5 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that the hard material is silicon carbide.

Claim 6 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that the hard ceramic material for the microparticles is an oxide, a carbide, a nitride or a boride or, alternatively, microparticles of at least two of these chemical compounds are embedded.

Claim 7 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that microparticles in a grain size spectrum around an average grain size d_{50} , which is located in the range between 1 and 5 μm , are embedded.

Claim 8 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that the embedded microparticles fill a volume proportion in the range between 0.5 and 15% in the nozzle material.

Claim 9 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that the microparticles are embedded in the region pointing toward the inside of the nozzle.

Claim 10 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that microparticles are embedded in the region of the nozzle opening.

Claim 11 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that microparticles are embedded in a locally differentiated manner.

Claim 12 (currently amended): The nozzle as claimed in claim 1 ~~one of the preceding claims~~, characterized in that the nozzle is essentially formed from copper or a copper alloy.

Claim 13 (currently amended): A method for manufacturing a nozzle for plasma cutting torches as claimed in claim 1 ~~one of claims 1 to 12~~, characterized in that the nozzle is manufactured by extrusion from a metal or metal alloy powder mixture containing microparticles.

Claim 14 (original): The method as claimed in claim 13, characterized in that the final contour of the nozzle is formed by a chip-removal machining process and/or a metal-forming process.